Patent claims

1. A method for controlling service provision in a telecommunications network including customer terminals (CT), used by customers for receiving services, at least one server (SP) for offering services to the customers, and control means (CU) for controlling the provision of the service to a customer, the method comprising the steps of

- providing the service by transmitting information to the customer terminal,

- making customer-specific payments for the service and sending information about said payments to the control means,

c h a r a c t e r i z e d by

- informing the control means of the current price of the services,

- maintaining at least one control parameter whose value is dependent on service price data and on payment data,

- comparing the value of the control parameter to a first threshold (TT), and

- stopping the provision of the service when the value of the control parameter has reached the first threshold.

2. A method according to patent claim 1, c h a r a c t e r i z e d by

- maintaining at least two control parameters,

- determining at least one threshold for each control parameter, and

- stopping the service when the value of a certain control parameter exceeds a certain first threshold corresponding to that control parameter.

3. A method according to patent claim 1 or 2, c h a r a c t e r i z e d by comparing the value of one control parameter to a second threshold (NT) and sending a notification to the customer terminal (CT) when the value of the control parameter reaches the second threshold.

4. A method according to patent claim 3, c h a r a c t e r i z e d in that said one control parameter is the control parameter whose value is used to stop the service, whereby said second threshold is smaller than said first threshold.

5. A method according to patent claim 1 or 2, c h a r a c t e r i z e d by using a control parameter which represents the debt incurred by the customer.

6. A method according to patent claim 4, c h a r a c t e r i z e d by calculating the value of the control parameter after each payment, comparing the control parameter to a third threshold (ADT) and sending a notification to the customer terminal when the value of the control parameter has reached said third threshold.

7. A method according to patent claim 1, c h a r a c t e r i z e d by using a

control parameter which represents the amount of time that the customer has been in debt to the service provider.

8. A method according to patent claim 1, c h a r a c t e r i z e d by using a control parameter which represents the ratio of the duration during which the customer

5   has been in debt to the service provider to the duration during which the customer has not been in debt to the service provider.

9. A method according to patent claim 1, c h a r a c t e r i z e d by

- maintaining a first and second control parameter,

- determining at least one threshold value for both control parameters so that

10   one of the parameter-specific values represents a stop value,

- stopping the service when the value of either control parameter reaches the stop value corresponding to it.

10. A method according to patent claim 9, c h a r a c t e r i z e d in that the first control parameter represents the debt incurred by the customer and a second

15   control parameter represents the amount of time that the customer has been in debt to the service provider.

11. A method according to patent claim 1, c h a r a c t e r i z e d by

- maintaining a first and second control parameter,

- determining a first threshold for the first control parameter and a second

20   threshold for the second control parameter,

- changing the first threshold value when the value of the second control parameter exceeds the second threshold value, and

- stopping the service when the value of the first control parameter reaches the first threshold value.

25   12. A method according to patent claim 1 or 2, c h a r a c t e r i z e d by changing the price of the service on the basis of the value of a control parameter.

13. A method according to patent claim 12, c h a r a c t e r i z e d by changing the price of the service on the basis of the value of the control parameter which is used to stop the service.

30   14. A method according to patent claim 1, c h a r a c t e r i z e d by determining the value of the control parameter on the basis of the current service session only.

15. A method according to patent claim 1, c h a r a c t e r i z e d by storing data concerning the service session of the customer and using the data relating

35   to at least one previous service session of the current customer when determining the value of the control parameter during the current service session.

16. A method according to patent claim 1 or 3, c h a r a c t e r i z e d by using timers to indicate when the value of a control parameter will reach a threshold value.

17. A method according to patent claim 1, c h a r a c t e r i z e d by
   - calculating the value of the control parameter periodically at predetermined moments of time,
   - storing the changes in the service price, which occur between two consecutive moments, and the moments of time corresponding to each change, and
   - using the stored information when calculating the value of the control parameter.

18. A method according to patent claim 1, c h a r a c t e r i z e d by calculating the value of the control parameter periodically and also when the price of the service changes and when a payment is received.

19. A method according to patent claim 1 in a network where several information flows are transmitted to a customer, c h a r a c t e r i z e d by
   - maintaining a control parameter and a threshold for each of the information flows, and
   - stopping said information flows if the control parameter value of at least one of the information flows reaches the threshold corresponding to it.

20. A method according to patent claim 1 in a network where several information flows are transmitted to a customer, c h a r a c t e r i z e d by
   - maintaining a control parameter and a threshold for each of the information flows, and
   - stopping only a single information flow when the control parameter value of said flow reaches the corresponding threshold.

21. A method according to patent claim 1 in a network where one information flow is transmitted to several customers, c h a r a c t e r i z e d by
   - maintaining customer-specific thresholds,
   - maintaining customer group-specific thresholds, and
   - choosing the values of said thresholds so that the information flow to the customer can be stopped before the information flow to the entire customer group is stopped.

22. A method according to patent claim 1 in a network where one information flow is transmitted to several customers, c h a r a c t e r i z e d by storing data concerning the service session of a customer group and using the data relating to at least one previous service session of the current customer group when determining the

value of the control parameter during the current service session.

23. A system for controlling service provision in a telecommunications network including customer terminals (CT), used by customers for receiving services, at least one server (SP) for offering services to the customers, and control means (CU) for controlling the provision of the service to a customer, the system comprising

- first means (SP) for providing the service by transmitting information to the customer terminal,

- second means (CT) for making customer-specific payments for the service and sending information about said payments to the control means,

c h a r a c t e r i z ed in that the system further comprises third means (SP) for informing the control means of the current price of the service, and that said control means comprise

- first control means (CHL) for maintaining at least one control parameter whose value is dependent on service price data and on payment data,

- comparison means (CHL) for comparing the value of a control parameter to a first predetermined threshold value (TT), and

- second control means (CHL, CLU2) for stopping the provision of the service when the value of the control parameter has reached the first threshold.